CLAIMS

What is claimed is:

1. A charge transport or anti-quenching materials selected by the method comprising:

(a) determining a first luminescence intensity I_0 of a luminescent material in the absence of the charge transport and/or anti-quenching material;

(b) determining a second luminescence intensity I_q of the luminescent material in the presence of the charge transport and/or anti-quenching material; and

(c) comparing the first luminescence intensity I_0 with the second luminescence intensity I_q to determine a degree of luminescence quenching of the charge transport and/or anti-quenching material with respect to the luminescent material; and

(d) determining whether the degree of quenching is appropriate for the desired electronic device of said charge transport and/or anti-quenching material.

2. The material of Claim 1, wherein the first luminescence intensity I_0 is compared with the second luminescence intensity I_q by visual observation.

3. The material of Claim 1 selected using a visual observation of photoluminescence in step (c) that the second luminescence intensity I_q is comparable to the first luminescence intensity I_0.

4. The material of Claim 1, selected by the method wherein comparing the first luminescence intensity I_0 with the second luminescence intensity I_q in step (c) is done using a photodetector.

5. The material of Claim 1, selected wherein determining the first luminescence intensity I_0 comprises preparing a solution having a luminescent material concentration of approximately 10^{-6} M to 10^{-2} M.

6. The method of Claim 1, wherein determining the second luminescence intensity comprises adding a fixed concentration [Q] of up to about 2.0 M of the charge transport and/or anti-quenching material to a solution of the luminescent material.

7. The material of Claim 1 selected by the method further comprising determining the second luminescence intensity I_q at a plurality of different concentrations of the charge transport and/or anti-quenching

material to determine a sensitivity of the second luminescence intensity I_q to a concentration of the charge transport and/or anti-quenching material.

8. The method of Claim 7 further comprising:

preparing a plot of $I_q/I_0 - 1$ against a concentration [Q] of a charge transport and/or anti-quenching material; and

determining the Stern-Volmer luminescence quenching constant based on a slope of the plot and an equation $(I_q/I_0) - 1 = k_q \tau_0 [Q]$.

9. The method of Claim 1, selected by the method further comprising selecting the charge transport and/or anti-quenching material having a low degree of luminescence quenching.

10. The material of Claim 8, selected by the method further comprising selecting the charge transport and/or anti-quenching material having a low Stern-Volmer luminescence quenching constant.

11. The material of Claim 8, wherein the low Stern-Volmer luminescence quenching constant has a value less than 500.

12. The method of Claim 8, wherein the low Stern-Volmer luminescence quenching constant has a value less than 100.

13. The material of Claim 1, selected by the method wherein the first luminescence intensity I_0 and the second luminescence intensity I_q are determined under substantially anaerobic conditions.

14. The material of Claim 1, selected by the method wherein the luminescent material is a fluorescent compound or an organometallic compound.

15. The material of Claim 14, selected by the method wherein the organometallic compound has a metal selected from metals selected from those that are in Group 3 through 15 of the Periodic Table and mixtures thereof and the fluorescent compound is AlQ_3.

16. The material of Claim 1, wherein the charge transport and/or anti-quenching material is a hole transport material or an electron transport material.

17. An organic electronic device wherein at least one charge transport or anti-quenching materials is selected based on a degree of luminescence quenching as determined by the method of Claim 1.

18. An electronic device of Claim 17, wherein at least one of the materials selected has a Stern-Volmer luminescence quenching constant less than 500.

19. A kit comprising:

(a) a means for holding one or more test compartments containing therein 10^{-2} to 10^{-6} Molar of light-emitting material;

(b) a charge transport/anti-quenching dispensing means; and

(c) a light source.

20. The kit according to Claim 19, wherein the kit further contains a CCD camera.

21. A kit according to Claim 19, wherein the light emitter is an organometallic complex.

22. A kit according to Claim 19, wherein the charge transport material is selected from the group consisting of MPMP, CBP, TPD, NBP, TDATA, and mixtures thereof.